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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,066	11/07/2001	Scott L. Diamond	3936-011568	3883

7590 01/26/2005

Barbara E. Johnson
700 Koppers Building
436 Seventh Avenue
Pittsburgh, PA 15219-1818

EXAMINER

LAM, ANN Y

ART UNIT	PAPER NUMBER
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1641

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/036,066	Applicant(s) DIAMOND, SCOTT L.	
	Examiner Ann Y. Lam	Art Unit 1641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 and 16-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/30/02, 11/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed November 10, 2004 lists as a foreign patent document, DE 196 28 928A, but this foreign document is not considered since there is no English translation of it

Election/Restrictions

Applicant's election of group II (claims 10-15) in the reply filed on November 10, 2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-9 and 16-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the dot constituents" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "the subcomponents" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 claims in the preamble the "subcomponents" and recites "further comprising multiple positive displacement microsyringe pumps; aerosol generating devices such as..." It is unclear as to whether the assay system comprises both the microsyringe pumps and the aerosol generating devices, or only at least one of these two.

In claim 12, the preamble claims the "subcomponents", but claim 10, from which claim 12 depends, claims an "assay system". It is unclear as to what Applicant is claiming in claim 12, the assay system, or the components.

Regarding claim 12, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Tisone, 5,738,728.

Tisone discloses an assay system comprising :

- a set of operating instructions resident in computer software (col. 7, line 57);

- a set of computer-controlled dot applicators (i.e., dispensing apparatus, col. 7, lines 44-45, col. 3, lines 15-26);

- a computer-controlled device for sample aerosol generation (col. 4, lines 23-29);

- a computer-controlled xy positioner (col. 3, lines 15-19, and col. 7, lines 44-46);

- a computer and operating software (col. 7, line 57); and

- a chamber for control of biological samples (col. 4, lines 23-25),

wherein dot applicators are capable of creating reaction spots to which aerosolized sample droplets are applied for computer-enhanced assay of any reaction between the sample droplets and the dot constituents (col. 3, lines 19-23.)

As to claim 11, said operating instructions send signals, via serial or parallel port, to start, to stop, to establish operating set points and to control subcomponents of the device (col. 7, lines 56-59.)

As to claim 12, the device further comprises multiple positive displacement microsyringe pumps (col. 5, lines 55-59, and aerosol generating devices (col. 4, lines 23-29.)

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As to claim 13, the microsyringes hold 1.0 microliters to 1000 uL of biological sample (col. 5, lines 65-66).

As to claim 14, the microsyringes deliver samples at a constant flow rate (col. 4, lines 66-67.)

Claims 10, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by French et al., 5,345,079.

French et al. discloses an assay system comprising :

- a set of operating instructions resident in computer software (col. 4, lines 11-15);

- a set of computer-controlled dot applicators (micropumps or nebulizers col. 17, lines 3-7, and col. 12, lines 52-53);

- a computer-controlled device for sample aerosol generation (col. 4, lines 11-15, and col. 17, lines 3-7);

- a computer-controlled xy positioner (col. 4, lines 10-12);

- a computer and operating software (col. 4, lines 10-12); and

- a chamber for control of biological samples (i.e., nozzles, col. 12, line 52),

wherein dot applicators are capable of creating reaction spots to which aerosolized sample droplets are applied for computer-enhanced assay of any reaction between the sample droplets and the dot constituents.

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As to claim 11, said operating instructions send signals, via serial or parallel port, to start, to stop, to establish operating set points and to control subcomponents of the device (col. 12, line 52.)

As to claim 15, the aerosol generation is an ultrasonic nebulizer (col. 17, line 6.)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Y. Lam whose telephone number is 571-272-0822. The examiner can normally be reached on M-Sat 11-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.L.



Christopher L. Chin
CHRISTOPHER L. CHIN
PRIMARY EXAMINER
GROUP 1800/1641
1/22/05